

CLAIMS

1. An ink cartridge, comprising:

an ink containing part including a holding member  
5 with an ink supply opening part and a sealed ink filling  
opening part;

a first housing including a holding part holding the  
holding member of said ink containing part;

a second housing whose outline is analogous to an  
10 outline of said first housing; and

a third housing fitted to a side of an assembly of  
said first and second housings from which side ink is supplied,  
wherein said first, second, and third housings are  
assemblable and disassemblable.

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2. The ink cartridge as claimed in claim 1, wherein  
said ink containing part is an ink bag including a bag-like  
part.

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3. The ink cartridge as claimed in claim 2, wherein  
the ink bag is formed of a member including an aluminum  
laminate film.

4. The ink cartridge as claimed in claim 1, further  
25 comprising an engagement mechanism that engages said first and

second housings.

5. The ink cartridge as claimed in claim 4, wherein  
said engagement mechanism comprises an engagement claw  
5 provided to one of said first and second housings and an  
engagement part provided to the other one of said first and  
second housings, the engagement claw and the engagement part  
engaging each other.

10 6. The ink cartridge as claimed in claim 1, further  
comprising an engagement mechanism that engages said third  
housing with said first and second housings.

7. The ink cartridge as claimed in claim 6, wherein  
15 said engagement mechanism comprises engagement claws provided  
to said third housing and engagement recesses provided to said  
first and second housings, the engagement claws engaging the  
engagement recesses.

20 8. The ink cartridge as claimed in claim 6, wherein  
said engagement mechanism comprises engagement recesses  
provided to said third housing and engagement claws provided  
to said first and second housings, the engagement recesses  
engaging the engagement claws.

9. The ink cartridge as claimed in claim 1, further comprising a label applied to each of said first and second housings so as to reinforce engagement of said third housing with said first and second housings.

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10. The ink cartridge as claimed in claim 1, further comprising a screw member that fixes said first and second housings together.

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11. The ink cartridge as claimed in claim 1, wherein at least one of said first, second, and third housings comprises a cutout beside the ink supply opening part and/or a cap member provided to an end of the ink supply opening part of said ink containing part.

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12. An ink cartridge housing for containing an ink containing part, comprising:

a first housing including a holding part holding a holding member provided to the ink containing part;

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a second housing whose outline is analogous to an outline of said first housing; and

a third housing fitted to a side of an assembly of said first and second housings from which side ink is supplied,

wherein said first, second, and third housings are

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assemblable and disassemblable.

13. The ink cartridge housing as claimed in claim 12, further comprising an engagement mechanism that engages said first and second housings.

5           14. The ink cartridge housing as claimed in claim 13, wherein said engagement mechanism comprises an engagement claw provided to one of said first and second housings and an engagement part provided to the other one of said first and second housings, the engagement claw and the engagement part  
10 engaging each other.

15           15. The ink cartridge housing as claimed in claim 12, further comprising an engagement mechanism that engages said third housing with said first and second housings.

16. The ink cartridge housing as claimed in claim 15, wherein said engagement mechanism comprises engagement claws provided to said third housing and engagement recesses provided to said first and second housings, the engagement  
20 claws engaging the engagement recesses.

17. The ink cartridge housing as claimed in claim 15, wherein said engagement mechanism comprises engagement recesses provided to said third housing and engagement claws  
25 provided to said first and second housings, the engagement

recesses engaging the engagement claws.

18. The ink cartridge housing as claimed in claim 12, further comprising a label applied to each of said first  
5 and second housings so as to reinforce engagement of said third housing with said first and second housings.

19. The ink cartridge housing as claimed in claim 12, further comprising a screw member that fixes said first  
10 and second housings together.

20. An ink bag sealing ink therein, the ink bag being housed in a housing of an ink cartridge, the ink bag comprising:

15 a bag-like part formed of a member including an aluminum laminate film; and

a holding member including an ink supply opening part and a sealed ink filling opening part,

20 wherein the ink bag engages and is held by an engagement and holding part provided to the housing of the ink cartridge, the housing being an ink cartridge housing as set forth in claim 12.

21. An ink-jet recording apparatus into which an  
25 ink cartridge containing an ink containing part is loadable

from a front side thereof, wherein:

the ink cartridge is an ink cartridge as set forth in claim 1.

5           22. An ink container attachable replaceably to an ink container loading part of an image-forming apparatus, comprising:

          a positioning part defining a positional relationship between the ink container and an ink introduction  
10 part provided to the ink container loading part.

          23. The ink container as claimed in claim 22, wherein said positioning part is a rib engageable with a groove provided to the ink container loading part.

15           24. The ink container as claimed in claim 22, wherein said positioning part is a groove engageable with a rib provided to the ink container loading part.

20           25. The ink container as claimed in claim 22, wherein said positioning part is provided at a position corresponding to a color of ink contained in the ink container.

          26. The ink container as claimed in claim 22,  
25 wherein a positional relationship between said positioning

part and an ink supply opening part for supplying ink to the image-forming apparatus is equal to that of another ink container, the other ink container containing ink of a color equal to that of ink contained in the ink container, and  
5 having a shape different from that of the ink container.

27. The ink container as claimed in claim 22, wherein a positional relationship between said positioning part and an ink supply opening part for supplying ink to the  
10 image-forming apparatus remains constant irrespective of a shape of the ink container.

28. An image-forming apparatus, comprising:  
an ink container loading part to which an ink  
15 container is replaceably attachable,  
wherein said ink container loading part comprises a positioning part for loading ink containers that contain ink of a single color and have different shapes.

20 29. The image-forming apparatus as claimed in claim 28, wherein an ink container as set forth in claim 22 is attachable to said ink container loading part.

30. An ink container, comprising:  
25 a dividable housing that houses an ink bag

containing ink,

wherein at least one screw member is employable as a fastening member to keep said dividable housing in an assembled state.

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31. The ink container as claimed in claim 30, wherein a plurality of screw members are employable as fastening members to keep said dividable housing in the assembled state; and

10 the screw members are tightened in a single direction.

32. The ink container as claimed in claim 31, wherein at least one of the screw members is concealed from  
15 outside view.

33. The ink container as claimed in claim 30, wherein said dividable housing is dividable into a plurality of parts; and  
20 a boss part into which the screw member is screwed is formed on one of the parts of said dividable housing, and a recess into which a head of the screw member is fitted is formed in another one of the parts of said dividable housing.

25 34. The ink container as claimed in claim 33,



wherein said boss part is provided at a position prevented from interfering with the ink bag.

35. The ink container as claimed in claim 30,  
5 wherein the fastening member is provided near a handle part provided to said dividable housing.

36. The ink container as claimed in claim 30,  
wherein the screw member is concealed from outside view.

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37. An image-forming apparatus, comprising:  
an ink container loading part to which an ink  
container is replaceably attachable,  
wherein said ink container is an ink container as  
15 set forth in claim 30.

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38. An ink cartridge, comprising:  
ink containing means including a holding member with  
an ink supply opening part and a sealed ink filling opening  
20 part;

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a first housing including holding means for holding  
the holding member of said ink containing means;

a second housing whose outline is analogous to an  
outline of said first housing; and

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a third housing fitted to a side of an assembly of

said first and second housings from which side ink is supplied,  
wherein said first, second, and third housings are  
assemblable and disassemblable.

5           39. An ink cartridge housing for containing ink  
containing means, comprising:

          a first housing including holding means for holding  
a holding member provided to the ink containing means;

          a second housing whose outline is analogous to an  
10 outline of said first housing; and

          a third housing fitted to a side of an assembly of  
said first and second housings from which side ink is supplied,  
wherein said first, second, and third housings are  
assemblable and disassemblable.

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          40. An ink bag sealing ink therein, the ink bag  
being housed in a housing of an ink cartridge, the ink bag  
comprising:

          a bag-like part formed of a member including an  
20 aluminum laminate film; and

          a holding member including an ink supply opening  
part and a sealed ink filling opening part,

          wherein the ink bag engages and is held by  
engagement and holding means provided to the housing of the  
25 ink cartridge, the housing being an ink cartridge housing as

set forth in claim 39.

41. An ink-jet recording apparatus into which an  
ink cartridge containing ink containing means is loadable from  
5 a front side thereof, wherein:

the ink cartridge is an ink cartridge as set forth  
in claim 38.

42. An ink container attachable replaceably to an  
10 ink container loading part of an image-forming apparatus,  
comprising:

positioning means defining a positional relationship  
between the ink container and ink introduction means provided  
to the ink container loading part.

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43. An image-forming apparatus, comprising:  
an ink container loading part to which an ink  
container is replaceably attachable,

wherein said ink container loading part comprises  
20 positioning means for loading ink containers that contain ink  
of a single color and have different shapes.